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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/755,884 01/05/2001 Christoph Lodde 44815/251563 4102 7590 09/29/2004 EXAMINER Roger T. Frost, Esq. CHANG, VICTOR S Merchant & Gould, LLC 3200 IDS Center ART UNIT PAPER NUMBER 80 South 80th Street 1771 Minneapolis, MN 55402-2215

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)		
Office Action Summary	09/755,884	LODDE, CHRISTOPH		
	Examiner	Art Unit		
	Victor S Chang	1771		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠ Responsive to communication(s) filed on <u>13 August 2004</u> .				
2a) This action is <b>FINAL</b> . 2b) ⊠ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4)⊠ Claim(s) <u>1-3 and 5-9</u> is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-3 and 5-9</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8)☐ Claim(s) are subject to restriction and/or	election requirement.			
Application Papers				
9)☐ The specification is objected to by the Examiner.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:				
1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)				
S. Patent and Trademark Office	6) Other:			

#### **DETAILED ACTION**

### Introduction

- 1. The Examiner has carefully considered Applicants' amendments and remarks filed on 8/13/2004. Applicants' amendments to claims 1, 3, 5 AND 6 have been entered.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Rejections not maintained are withdrawn. In particular, in view of the amendment, the rejections in sections 4-6 of Office action dated 4/13/2004 are withdrawn. Additionally, the Examiner restates the rejection based on prior art as follows.

# Claim Rejections - 35 USC § 102

**4.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mamish (US 5227225).

Mamish's invention is directed to methods for preparing masking tapes by coating a thin layer of a polyolefinic material onto a lightweight nonwoven cloth and then

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applying a layer of adhesive onto the opposed surface of the nonwoven cloth (Abstract). Mamish teaches that the coated polyolefinic backing layer will both coat the surface of the cloth and invade its interstices, so that the nonwoven cloth may be said to be "embedded" (impregnated) (column 1, lines 56-61). Additionally, the polyolefin backing layer of the masking tape acts as a sealant to the discontinuous nonwoven surface and serves as a barrier layer against adhesive migration (column 1, lines 65-67).

For claim 1, Mamish is silent about the basis weights of the nonwoven and the thermoplastic resin. However, since Mamish teaches the same subject matter as the instant invention, it is the Examiner's position that, in the absence of unexpected results, suitable basis weights of the nonwoven and thermoplastic resin are either anticipated by Mamish, or an optimization to one of ordinary skill in the art, motivated by the desire to obtain a masking tape with an adequate basis weight for the nonwoven to provide a required strength, and sufficient basis weight for the sealing coating against adhesive migration. It should be noted that where the claimed and prior art products are shown to be identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. See MPEP § 2112.01. As to the product-byprocess limitations (impregnated by dipping or spray), the Examiner notes that that Applicant must show that the resultant article is patentably distinct from those taught by the reference, since the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation at the present time has not been given patentable weight. It should be noted that product-by-process claims are

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product claims and that to be limiting in a product claim, a process limitation must be evidenced as effecting the structure or chemistry of the resultant product over the prior art. Further, the burden of proof for this showing is on Applicant after the Examiner presents an otherwise *prima facie* rejection. See MPEP § 2113.

For product-by-process claims 2 and 3, Mamish expressly teaches that the fibers may first be carded to orient them primarily in the machine direction. The carded fibers may then be subjected to scrambling, after which they may be chemically or thermally bonded, or <a href="https://www.hydroentangled">hydroentangled</a> (water jets) to produce the nonwoven fabric, all in <a href="https://www.new.hydroentangled">per se</a> known manner in the art (column 3, lines 17-23). As such, although Mamish lacks express teachings that the nonwoven is reinforced by needling or air jets, Applicant must show that the resultant article is patentably distinct from those taught by the reference. Further, the Examiner notes that, in the absence of unexpected results, the selection of a known equivalent process based on its suitability for its intended use supported a <a href="prima facie">prima facie</a> obviousness determination, motivated by the desire to obtain a nonwoven backing with required tensile properties.

For claim 5, Mamish expressly teaches that suitable synthetic fibers for the nonwoven cloth include the <u>rayons</u>, <u>polyesters</u>, etc. (column 3, lines 14-17).

For claim 6, Mamish teaches that the adhesives may be <u>any</u> of those heretofore employed in the art for preparing masking tapes, such as <u>rubbery block copolymers</u>, etc. (column 3, lines 30-46).

For claims 7 and 8, although Mamish lacks an express teaching about the basis weight of adhesive coating, Mamish does teaches that the adhesive layer is applied on

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the order of one mil thick (column 3, lines 50-52). As such, since Mamish teaches the same subject matter as the instantly claimed invention, in the absence of unexpected results, it is the Examiner's position that a suitable basis weight for the adhesive coating is either anticipated by Mamish, or an obvious optimization to one of ordinary skill in the art, motivated by the desire to obtain a masking tape with required adhesion strength.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mamish (US 5227225) in view of Hansen et al. (US 4133731).

The teachings of Mamish are again relied upon as set forth above.

For claim 9, Mamish lacks an express teaching that the adhesive coating comprises a UV crosslinkable acrylate adhesive. However, Mamish does teach that the adhesives may be <u>any</u> of those heretofore employed in the art for preparing masking tapes, as set forth above. Further, it is noted that Hansen's invention is directed to a cured adhesive composition possessing excellent cohesive strength at high temperatures along with excellent adhesion, shear strength and solvent resistance is prepared by the radiation initiated curing of an adhesive composition comprising a di-to-tetra-functional acrylate or methacrylate (Abstract). The adhesive based automotive making masking tapes can be removed cleanly when it is stripped from a painted car as it leaves the paint baking ovens (column 5, lines 49-51). In one embodiment, Hansen teaches that the adhesive is UV crosslinkable (column 8, lines 34-35). As such, it would have been obvious to one of ordinary skill in the art to modify Mamish's masking tape with Hansen's UV crosslinkable pressure sensitive adhesive, motivated by the desire to obtain a masking tape for automotive painting applications. As to the basis weights of

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the nonwoven and the adhesive, the Examiner repeats that since Mamish teaches the same subject matter as the instantly claimed invention, in the absence of unexpected results, it is the Examiner's position that a suitable basis weights for the nonwoven and the adhesive coating are either anticipated by Mamish, or obvious optimizations to one of ordinary skill in the art, motivated by the desire to obtain a masking tape with required backing and adhesion strengths.

### Response to Amendment

7. With respect to Applicant's argument "The masking tape of *Mamish* comprises, but does not *consist essentially* of ... *Mamish*'s masking tape clearly requires ... a polyolefin backing layer ... The backing layer of *Mamish* is indispensable to obtain the desired properties of that product. According to the *present invention*, however, the advantageous properties of a textile adhesive tape are obtained without a polymer backing layer" (Remarks, pages 4-5, bridging paragraph), the Examiner notes that Mamish teaches the invention as claimed, i.e., Mamish's coating of "a thin layer of a polyolefinic material onto a light weight nonwoven" (column 1, lines 39-41) for sealing purpose clearly reads on the instantly claimed limitation in claim 1: "the nonwoven is impregnated ... with a thermoplastic resin with a basis weight of ... 1 to 5 g/m²". As such, with respect to the claim language "consisting essentially of", it is not seen how this phrase is to narrow the claim scope to exclude Mamish. It seem to the Examiner, as set forth in the grounds of rejection, that each element claimed instantly is found in

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the art of Mamish and <u>no additional features are required thereby</u>, even if one were to hold "consisting essentially of" as limiting.

With respect to Applicant's argument "a person skilled in the art would understand the technical meaning of "impregnation" in the present context, and that person would not consider Mamish as teaching impregnation of the cloth by the coated polyolefinic backing layer" (Remarks, page 6, second paragraph), the Examiner repeats that Mamish teaches that the coated polyolefinic backing layer will both coat the surface of the cloth and invade its interstices, so that the nonwoven cloth may be said to be "embedded" (impregnated). Further, since the scope of the term "impregnation" has not been redefined in the specification, the again notes that the recitation in claim 1 fails to preclude Mamish's teaching, and Examiner suggests that the exact scope of the term "impregnation" of the instant invention must be incorporated into claim 1, so as to establish a clear and distinctive patentable feature of the instant invention.

With respect to Applicant's argument that "Claim 1 now requires that the impregnation occurs by dipping or spraying with the recited thermoplastic resin.

Mamish does not teach such a method, the Applicant submits that the backing layer of Mamish cannot be produced by such a method" (Remarks, page 6 bottom paragraph), the Examiner repeats that Attorney's argument cannot takes the place of an evidence. Applicant must show persuasive evidentiary support that the resultant article is patentably distinct from those taught by the reference, as set forth above.

Similarly, with respect to Applicant's argument "A coating resin with basis weight of one to five g/m² would not be sufficient for embedding the light-weight nonwoven of

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Mamish, and would not be applicable by coextrusion process described by Mamish" (Remarks, page 7, bottom paragraph), the Examiner repeats that Attorney's argument cannot takes the place of an evidence. Further, the Examiner repeats that Mamish expressly teaches "coating a <a href="thin">thin</a> layer of a polyolefinic material onto a light weight nonwoven" for sealing purpose, as set forth above, and extrusion coating is a <a href="preferred">preferred</a> embodiment (column 1, lines 44-46) which does not appear to be a required forming method.

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Vse

Victor S Chang Examiner Art Unit 1771

9/13/2004

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